

What is claimed is:

1. A one-trip system for use in a subterranean well comprising:  
an upper completion assembly;  
a lower completion assembly attached to the upper completion assembly; and in which  
once the upper and lower completion assemblies are properly positioned in the well, all  
completion operations can be performed without the use of a rig.
2. The one-trip system of claim 1 in which the upper completion assembly comprises:  
a tubing hangar mounted to the well or a well casing near the earth's surface;  
a production tubing sealingly attached to the tubing hangar; and  
a packer attached to a lower end of the production tubing.
3. The one-trip system of claim 2 in which the upper completion assembly further  
comprises a valve located near the earth's surface and mounted above the tubing hangar to  
control flow of well fluids.
4. The one-trip system of claim 2 in which the upper completion assembly further  
comprises a surface-controlled subsurface safety valve located in-line with the production  
tubing.
5. The one-trip system of claim 2 in which the upper completion assembly further  
comprises an artificial lift device to assist in the production of well fluids.
6. The one-trip system of claim 5 in which the artificial lift device is a gas lift mandrel  
or an electric submersible pump.
7. The one-trip system of claim 2 in which the upper completion assembly further  
comprises an upper sliding sleeve valve mounted in-line with the production tubing above the  
packer.

8. The one-trip system of claim 2 further comprising an extension having an intermediate sliding sleeve valve mounted below the packer.

9. The one-trip system of claim 1 in which the lower completion assembly comprises:

a selective nipple attached to a lower end of the upper completion assembly;

a shroud attached to the selective nipple;

an inner string releasably mounted within the interior of the lower completion assembly;

a no-go nipple mounted to the shroud; and

a perforating assembly mounted below the no-go nipple.

10. The one-trip system of claim 9 in which the perforating assembly includes a perforating gun.

11. The one-trip system of claim 9 in which the perforating assembly includes a firing head.

12. The one-trip system of claim 9 in which the perforating assembly includes a safety spacer.

13. The one-trip system of claim 9 further comprising a lock to keep the inner string secured to the selective nipple.

14. The one-trip system of claim 9 in which the inner string comprises a sand exclusion device.

15. The one-trip system of claim 14 in which the sand exclusion device is a sand screen.

16. The one-trip system of claim 14 in which the sand exclusion device is an expandable element.

17. The one-trip system of claim 9 in which the inner string can be moved from a first configuration of being mounted to the selective nipple to a second configuration in which it is mounted to the no-go nipple.

18. The one-trip system of claim 9 in which the inner string comprises a lower sliding sleeve valve.

19. A completion system for use in a subterranean well comprising:

an upper assembly having upper completion components;

a lower assembly joined to a lower end of the upper assembly, the lower assembly having lower completion components; and in which

the upper and lower completion components can be operated without a rig.

20. The completion system of claim 19 in which the upper completion components comprise a production tubing and a packer.

21. The completion system of claim 20 in which the upper completion components further comprise a tubing hangar, a surface valve, and a subsurface valve.

22. The completion system of claim 20 in which the upper completion components further comprise an upper valve to permit or prevent fluid communication between the interior of the production tubing and the exterior of the production tubing.

23. The completion system of claim 20 in which the upper completion components further comprise an artificial lift device.

24. The completion system of claim 20 in which the upper completion components further comprise an extension tubing below the packer, the extension having an intermediate valve to permit or prevent fluid communication between the interior of the extension tubing and the exterior of the extension tubing.

25. The completion system of claim 19 in which the lower completion components comprise an upper nipple, a lower nipple, and an inner string that is moveable from a first

state of being releasably secured to the upper nipple to a second state of being secured to the lower nipple.

26. The completion system of claim 25 in which the inner string includes a sand exclusion device.

27. The completion system of claim 25 in which the inner string includes a lower valve to permit or prevent fluid communication between the interior of the inner string and the exterior of the inner string.

28. The completion system of claim 19 in which the lower completion components include a perforating gun.

29. A method to complete a subterranean well in one trip comprising:  
providing a one-trip completion system;  
placing the one-trip completion system in its proper position in the well using a rig;  
removing the rig; and  
actuating and operating the one-trip completion system using a continuous medium.

30. The method of claim 29 in which the continuous medium is coiled tubing, wireline, or slickline.

31. The method of claim 29 in which the actuating and operating includes performing a gravel pack operation.

32. The method of claim 29 in which the actuating and operating includes performing a fracturing operation.

33. The method of claim 29 in which the actuating and operating includes performing a perforating operation.

34. The method of claim 29 in which the actuating and operating includes moving a sand exclusion device to a position adjacent perforations in a well casing.

35. A method to complete a well in one trip comprising:

placing a one-trip completion system in a desired location in the well using a rig, the one-trip completion system having a perforating gun, a sand screen, and production tubing;

removing the rig;

firing the perforating gun to create perforations in a subsurface formation;

moving the sand screen to a position adjacent the perforations;

pumping gravel outside of and around the sand screen; and

producing fluids from the well through the production tubing.